

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RALPH E. SIPPLE, MICHAEL J. HILL and DENNIS R. KONRAD

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Appeal No. 1996-3701  
Application 08/076,587<sup>1</sup>

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ON BRIEF

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Before THOMAS, JERRY SMITH and LALL, Administrative Patent Judges.

LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection<sup>2,3</sup> of Claims 13 and 14.

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<sup>1</sup> Application for patent filed June 14, 1993.

<sup>2</sup> Claims 1 to 3, 13 to 17 and 21 were finally rejected [paper no. 6], however, the rejection of claims 1 to 3, 15 to 17 and 21 was withdrawn in the examiner's answer [paper no. 12].

<sup>3</sup> An amendment after final was filed [paper no. 8] and was entered in the record [paper no. 9].

The invention concerns an apparatus and a method of efficiently maintaining an audit trail for rapid recovery from data media failures. Large processing systems are used for real time posting of transactions from a large number of terminals or work stations to a single or a small number of related data bases. Real time banking, airline reservations and theater ticketing are examples of applications for such data processing systems. There is a great need to protect against the loss of a portion of the data base and the corresponding transactions through unrecoverable disk errors and/or data corruption. Loss of a single transaction in a real time banking or airline reservation system is unacceptable. One known solution is to periodically dump the entire data base to a magnetic tape to capture the status of the data base at periodic intervals. If an unrecoverable error occurs, the magnetic tape containing the most recent data base dump may be reloaded. In this approach, all data base transactions that occur after the last data base dump are lost, a situation which is unacceptable in some applications including the banking and the airline reservation systems. The invention creates an audit trail of the real time transactions

and further segregates the audit trail information according to which physical or logical storage file it relates to. In this approach, recovery from a physical disk drive or logical file failure necessitates access only to the audit trail information storage corresponding to that physical disk drive or logical file. This results in a much faster recovery of the system in case of an error in a real time transaction. The invention is further illustrated by the following claim.

Claim 13 below is representative of the invention:

13. An apparatus comprising:

- a. a plurality of storage devices for storing a data base;
- b. a transaction processing system coupled to said plurality of storage devices for modifying said data base in response to a series of transactions;
- c. an audit trail storage area coupled to said transaction processing system for storing a record of said modifying of said data base in response to said series of transactions; and
- d. A data base dump facility coupled to said transaction processing system for storing said data base in response to a filling of said audit trail storage area.

Appeal No. 1996-3701  
Application 08/076,587

The Prior Art<sup>4</sup> applied:

The admitted prior art: Appellants' disclosure (APA)

Claims 13 and 14 stand rejected 35 U.S.C. § 103 over APA.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the briefs<sup>5</sup> and the answer for the respective details thereof.

#### OPINION

We have considered the rejections advanced by the Examiner and the supporting arguments. We have, likewise, reviewed the Appellants' arguments set forth in the briefs.

It is our view that the rejection under 35 U.S.C. § 103 over APA is affirmed with respect to claim 13, but is reversed with respect to claim 14. Accordingly, we affirm in part.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d

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<sup>4</sup> Only the prior art applied to claims 13 and 14 is listed here, the other two references applied to the final rejection of claims now indicated as allowable in the examiner's answer [page 4] are not listed here.

<sup>5</sup> A reply brief was filed on Mar. 4, 1996 [paper no. 13] and was entered in the record [paper no. 15].

1955, 1956 (Fed. Circuit. 1993). A prima facie case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Circuit. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ

Appeal No. 1996-3701  
Application 08/076,587

173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the Appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. See, e.g., Grain Processing Corp. v. American Maize-Products Co., 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Circuit. 1988). On the other hand, we are also guided by the precedence of our reviewing court that the limitations from the disclosure are not to be imported into the claims. In re Lundberg, 244 F.2d 543, 548, 113 USPQ 530, 534 (CCPA 1957); In re Queener, 796 F.2d 461, 464, 230 USPQ 438, 440 (Fed. Circuit. 1986).

With this as background, we analyze the prior art applied by the Examiner in the rejection of the claims on appeal.

Rejection of claims 13 and 14 under 35 U.S.C. § 103

We treat the independent claim 13 first. The Examiner has rejected this claim as being obvious over APA. Appellants argue that APA does not show the limitation: "a data base dump ... in response to a filling of said audit trail storage area" (claim 13, lines 10 to 12) [brief, pages 50 to 52]. The Examiner yields to this argument, however, the Examiner contends that "[i]t

would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the data base dump taught by the admitted prior art for storing the data base in response to a filling of the audit trail storage area" [answer, pages 3 to 4]. Appellants argue that it is improper for the Examiner to make such an assertion without any evidence [brief, pages 52 to 54]. As a general proposition, we agree with Appellants. However, in this fact situation, we need a closer review of claim 13. We find that APA in figure 1 does show that the audit trail storage area, 24, dumps its stored information onto the magnetic tapes 50, albeit periodically. So the question becomes: would it have been obvious to one of ordinary skill in the art at the time of the invention to dump the contents of said audit trail storage area 24 when it (24) gets full instead of doing so periodically? We answer this query affirmatively. One faced with a filled audit trail storage area and having available an additional storage space to dump such information would naturally take advantage of the available additional dump space so that the audit trail storage area is available anew for storing further audit transactions. That, in our view, is the essence of the Examiner's rejection. In this view, we

observe that an artisan must be presumed to know something about the art apart from what the references (i.e., prior art) disclose (see In re Jacoby, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962)) and the conclusion of obviousness may be made from "common knowledge and common sense" of the person of ordinary skill in the art (see In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)). Moreover, skill is presumed on the part of those practicing in the art. See In re Sovish, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Circuit. 1985). Here, we find that an artisan, looking at APA, would have found it obvious to dump the contents of the audit trail storage area 24 into the dump tapes 50 in response to when said storage 24 gets filled up, instead of doing the dumping periodically. Thus, we sustain the obviousness rejection of claim 13 over APA.

Regarding claim 14, the concept contained is the same as in claim 1, i.e., "said audit trail storage area is segregated into a plurality of individual audit trail storage areas and wherein each of said plurality of individual audit trail storage areas corresponds to a different one of said plurality of storage devices" (claim 14, lines 1 to 5). Reviewing the history of



prosecution of this invention, we note that the Examiner had rejected claim 1 over APA in view of two other prior art references, however, the Examiner has withdrawn the rejection of claim 1 and has indicated the allowance of claim 1 [answer, page 4]. We find a lack of consistency in the rejection of claim 14 over the APA alone, while a rejection of claim 1 based on APA and the two additional references has been withdrawn. Whereas, we note that the basic concept of taking an audit trail storage area, 24 in APA, and segmenting it into several individual audit trail storage areas such that each of them corresponds to an individual storage device is simple, we cannot hold it would have been obvious over APA in view of the Examiner having withdrawn the rejection of claim 1 over APA plus two other references. We refrain from indulging in mere speculation and let the Examiner use her expertise in this matter. Therefore, we cannot sustain the obviousness rejection of claim 14 over APA.

In summary, we have sustained under 35 U.S.C. § 103 the rejection of claim 13, while we have not sustained the rejection of claim 14. Accordingly, the decision of the Examiner rejecting claims 13 and 14 under 35 U.S.C. § 103 is affirmed in part.

Appeal No. 1996-3701  
Application 08/076,587

No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a).

AFFIRMED-IN-PART

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
JERRY SMITH	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
PARSHOTAM S. LALL	)	
Administrative Patent Judge	)	

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Appeal No. 1996-3701  
Application 08/076,587

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